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**CenterPoint Energy Houston Electric,
LLC**

2022 Energy Efficiency Plan and Report

Pursuant to 16 Tex. Admin. Code § 25.181(l)

April 1, 2022

Project No. 52949

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Introduction

CenterPoint Energy Houston Electric, LLC (CenterPoint Houston or the Company) presents this Energy Efficiency Plan and Report (EEPR) to comply with 16 Tex. Admin. Code (TAC) § 25.181, § 25.182 and §25.183, which implement Public Utility Regulatory Act (PURA) § 39.905. PURA § 39.905 and 16 TAC § 25.181 require that each investor-owned electric utility achieve the following savings goal through market-based standard offer programs (SOPs) and limited, targeted, market transformation programs (MTPs):

- 0.4% reduction of the electric utility's peak demand of residential and commercial customers for the 2021, 2022 and 2023 program years.

The format used herein is consistent with the requirements outlined in 16 TAC § 25.181(l) and the Company's Revised 2021 EEPR filing in June 2021 under Project 51672. The EEPR presents the results of CenterPoint Houston's 2021 energy efficiency programs and describes how the Company plans to achieve its goals and meet the requirements set forth in 16 TAC § 25.181. Planning information provided focuses on 2022 and 2023 projected savings and budgets, as well as information on programs to be offered, and discusses outreach, informational activities and workshops designed to encourage participation by energy service providers and retail electric providers (REPs).

EEPR Organization

This EEPR consists of an executive summary, fifteen sections, and three appendices. Sections one through four provide the Energy Efficiency Plan (The Plan), while sections five through eleven present energy efficiency report information. The final four sections address the Energy Efficiency Cost Recovery Factor (EECRF). The three appendices provide a description of the acronyms used throughout the report, give the location of the glossary of commonly used terms, and the demand and energy savings for each program by county.

Executive Summary

The Plan portion of this EEPR details CenterPoint Houston's plans to achieve a 0.4% reduction in its peak demand of residential and commercial customers by December 31, 2022, and another 0.4% reduction in its peak demand of residential and commercial customers by December 31, 2023. The Plan also addresses the corresponding energy savings goal, which is calculated from the demand savings goal using a 20% capacity factor. The goals, budgets, and implementation plans that are included herein are determined by requirements of 16 TAC § 25.181 and the information gained from prior implementation of the selected programs. Table 1 presents a summary of 2022 and 2023 goals, projected savings, and projected budgets.

Table 1: Summary of Annual Goals, Projected Savings and Projected Budgets¹

	Calendar Year	Normalized Peak Demand	MW Goal	Demand (MW) Goal	Energy (MWh) Goal ²	Projected MW Savings	Projected MWh Savings ³	Projected Budget (in 000's)
Annual Goals	2022	16,219	0.4% of peak demand	64.88	113,670	183.46	214,129	\$37,599
	2023	16,273	0.4% of peak demand	65.09	114,038	185.43	227,636	\$36,602

¹ Peak Demand figures are from Table 4; Projected MW and MWh Savings from Table 5; Projected Budget from Table 6. All MW and MWh figures in this Table and throughout this EEPR are measured at the meter.

² Calculated using a 20% capacity factor.

³ Peak demand reduction and energy savings projections are for the current and following calendar year that CenterPoint Houston is planning and budgeting for in the EEPR. These projected savings reflect estimates based on information gained from prior implementation of the programs.

To reach the projected savings presented in Table 1, CenterPoint Houston will implement the following programs:

1. Commercial Standard Offer Program
2. Commercial MTP (SCORE, Healthcare, Data Center)
3. Commercial Load Management Standard Offer Program
4. Retro-Commissioning MTP
5. Retail Electric Provider MTP (Commercial CoolSaver)
6. Commercial High Efficiency Foodservice MTP (Pilot)
7. Advanced Lighting MTP
8. CenterPoint Energy High Efficiency Home MTP
9. Residential & Small Commercial Standard Offer Program
10. Smart Thermostat Program
11. Midstream MTP (HVAC and Pool Pump Distributor)
12. Retail Electric Provider MTP (Residential CoolSaver and Efficiency Connection)
13. Residential Load Management Standard Offer Program
14. Multi-Family MTP Market Rate
15. Hard-to-Reach Standard Offer Program⁴
16. Multi-Family MTP Hard-to-Reach
17. Targeted Low Income MTP (Agencies in Action)

As detailed in this report, CenterPoint Houston successfully implemented SOPs and MTPs required by PURA § 39.905 that met the statutory energy efficiency savings goal of 0.4% peak demand reduction. CenterPoint Houston's goals for 2021 were 63.69 MW in peak demand reduction and 111,585 MWh in energy savings. Actual achieved reductions in 2021 totaled 212.4 MW and 237,486 MWh respectively. The total forecasted spending for 2021 was \$38.25 million, and actual 2021 spending totaled \$36.5 million.

⁴ TAC § 25.181(c)(27) defines Hard-to-Reach as "Residential customers with an annual household income at or below 200% of the federal poverty guidelines."

Energy Efficiency Plan

I. 2022 Programs

A. 2022 Program Portfolio

CenterPoint Houston plans to implement 17 programs in 2022. These programs target both broad market segments and specific market sub-segments that offer significant opportunities for cost-effective savings. CenterPoint Houston anticipates that targeted outreach to a broad range of service providers will be necessary to meet the savings goals required by PURA § 39.905 on a continuing basis. Table 2 lists each program and identifies target markets and applications.

Table 2: 2022 Energy Efficiency Program Portfolio

Program	Target Market	Application
Commercial Standard Offer Program	Large Commercial	Retrofit; New Construction
Commercial MTP (SCORE, Healthcare, Data Center)	Large Commercial	Retrofit; New Construction
Commercial Load Management Standard Offer Program	Large Commercial	Load Management
Retro-Commissioning MTP	Large Commercial	Tune-up of existing facilities
Retail Electric Provider (REP) MTP (Commercial CoolSaver)	Large Commercial	Retrofit
Commercial High Efficiency Foodservice MTP (Pilot)	Large Commercial	Retrofit; New Construction
Advanced Lighting MTP	Residential & Commercial	Retrofit; New Construction
CenterPoint Energy High Efficiency Home MTP	Residential	New Construction
Residential & Small Commercial Standard Offer Program	Residential & Commercial	Retrofit
Smart Thermostat Program	Residential	Retrofit; New Construction
Midstream MTP (HVAC and Pool Pump Distributor)	Residential	Retrofit; New Construction
Retail Electric Provider (REP) MTP (Residential CoolSaver and Efficiency Connection)	Residential	Retrofit
Residential Load Management Standard Offer Program	Residential	Load Management
Multi-Family MTP Market Rate	Residential	New Construction
Hard-to-Reach Standard Offer Program	Hard-to-Reach	Retrofit
Multi-Family MTP Hard-to-Reach	Hard-to-Reach	Retrofit; New Construction
Targeted Low Income MTP (Agencies in Action)	Hard-to-Reach	Retrofit

The programs listed in Table 2 are described further in sub-section B. CenterPoint Houston maintains two energy efficiency websites:⁵ one designed for the end user and one for project sponsors. The energy efficiency sponsor portal contains project participation requirements and forms required for project submission. These websites provide project sponsors with program updates and information.

B. Existing Programs

Commercial Standard Offer Program

Program Design

The Commercial SOP targets commercial customers by offering financial incentives for the installation of efficient measures in new or retrofit applications. Eligible measures include lighting, HVAC, chillers, motors, refrigeration, renewables, and other custom projects.

Implementation Process

CenterPoint Houston will continue implementation of its Commercial SOP where any eligible project sponsor may submit applications for qualifying projects.

Outreach and Research Activities

- Maintains internet website with program processes on how to register for participation, as well as how to input a viable project, detailed project eligibility, end-use measures, incentives, workbooks to assist with providing incentive estimates, as well as procedures and application forms;
- Collaborates with internal departments to leverage existing relationships with commercial customers, informing them of energy efficiency opportunities;
- Participates in appropriate industry-related meetings and events to generate awareness and interest; and
- Conducts workshops as necessary to explain elements such as: responsibilities of the project sponsor, project requirements, incentive information, and the portal application and reporting process.

⁵ CenterPoint Houston's energy efficiency website is www.centerpointefficiency.com. CenterPoint Houston's sponsor portal is <https://cnpsponsor.programprocessing.com/>.

Commercial Market Transformation Program (Commercial MTP)

Program Design

The Commercial MTP includes the following three program offerings: SCORE/CitySmart, Healthcare Energy Efficiency Program (HEEP), and the Data Center Energy Efficiency Program (DCEEP).

The SCORE/CitySmart program targets public and private K-12 schools, public and private higher education, cities, counties, state governmental agencies, non-profit and faith-based organizations.

Program participants are provided with technical assistance, engineering analysis, and performance benchmarking to help them make decisions about cost-effective investments.

HEEP provides technical support and financial incentives for implementing energy efficiency projects to eligible healthcare facilities including hospitals, doctors' offices, clinics, laboratories, medical office buildings, and assisted living/nursing care facilities. Program participants are provided with technical assistance, engineering analysis, and performance benchmarking to help them make informed decisions about installing cost-effective energy efficient measures.

DCEEP provides technical support and incentives for implementing energy efficiency projects to commercial customers that have a dedicated data center, server room or server closets. Program participants are incentivized for installing a variety of energy saving measures, e.g., data storage, web hosting and telecommunications.

Implementation Process

The Commercial MTP uses third party implementers to help eligible participants identify energy efficient measure upgrades in their facilities. The program pays incentives to participants for approved measures that result in both demand and energy savings.

Outreach and Research Activities

- Contracts with third-party program implementers to conduct outreach and planning activities;
- Participates in appropriate industry-related meetings and events to generate awareness and interest; and
- Conducts trainings as necessary to explain elements of program requirements, incentive information, application and reporting processes.

Commercial Load Management Standard Offer Program

Program Design

The Commercial Load Management Standard Offer Program is available to non-residential distribution customers, as well as governmental, educational, and non-profit transmission customers. Curtailments will be initiated when the Electric Reliability Council of Texas (ERCOT) declares an Energy Emergency Alert 2 (EEA2)⁶ event or deems that an EEA2 event is imminent, or to support local system emergency situations. Incentives will be paid for measured and verified kW reductions to project sponsors based on average performance of all their events. Participating facilities must be equipped with an Interval Data Recorder (IDR) or smart meter and be able to curtail a minimum of 100 kW to be eligible.

Implementation Process

Implementation of this program will be through customers and third-party entities representing eligible facilities within the CenterPoint Houston service territory. The program will initiate up to a maximum of six events totaling 22 hours per year during the summer on peak period (up to a maximum of two test curtailments lasting one to three hours; and up to a maximum of four unscheduled events based on ERCOT EEA2 events lasting one to four hours each). A thirty-minute notice is given to all participants prior to each event.

Outreach and Research Activities

- Maintains program information in the program tracking database;
- Conducts trainings as necessary to explain elements such as responsibilities of the project participant, program requirements, incentive information, and the application and reporting process;
- Participates in appropriate industry-related meetings and events to generate awareness and interest.

⁶ Energy Emergency Alert (EEA) 2 – ERCOT may issue an EEA level 2 when operating reserves are less than 1,750 MW and are not expected to recover within 30 minutes. ERCOT may reduce demand on the system by interrupting power from large industrial customers who have contractually agreed to have their electricity turned off during an emergency. ERCOT may also use demand response resources that have been procured to address tight operating conditions. Website: <http://www.ercot.com>

Retro-Commissioning MTP

Program Design

Retro-Commissioning MTP is an optimization program that identifies no cost or low-cost measures (up to a three-year simple payback) the customer can implement to reduce the demand and energy usage in existing commercial facilities. The program provides end-users with a free engineering analysis to identify measures that will improve the performance within their facilities by reducing electric demand and consumption. Facility owners are required to implement all identified measures with a simple payback of less than one and a half years or pay the cost of the analysis. Customers are also eligible to receive incentives based on kWh savings and how quickly the low-cost or no-cost measures are implemented.

Implementation Process

The program is implemented through a third-party implementer. Program information is provided on CenterPoint Houston's website. Retro-Commissioning Agents, typically engineering consulting firms, are used to deliver the program to customers. The engineering analysis is comparable to an ASHRAE Level 2 audit.⁷

Outreach and Research Activities

- Maintains internet website with detailed project eligibility, procedures, and application forms;
- Participates in appropriate industry-related meetings and events to generate awareness and interest;
- Conducts workshops as necessary to explain elements such as responsibilities of the project sponsor and RCx Agents, program requirements, incentive information, and the application and reporting process;
- Utilizes a bi-annual e-newsletter that highlights program offerings and relevant commercial measure articles; and
- An optional Monitored Based Commissioning (MBCx) component was added in 2021. MBCx involves the use of hardware and software to commission buildings on a more frequent basis, using trend data to identify new energy savings opportunities and to evaluate underperforming measures to improve persistence of savings.

⁷American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE) Audit Level 2 - Energy Survey and Analysis: includes the ASHRAE Level 1 walk-through analysis, but adds detailed energy calculations and financial analysis of proposed energy efficiency measures. Website: <http://www.ashrae.org/>

Retail Electric Provider (REP) MTP

Program Design

This program offers energy saving products and services to end use residential and/or commercial customers through participating Retail Electric Providers (REPs). Participating REPs market energy saving measures and services to their customers in the CenterPoint Houston service territory. REPs can participate in the following programs:

- CoolSaver A/C Tune-up Program – Residential
- CoolSaver A/C Tune-up Program – Commercial
- Efficiency Connection Electronic Marketplace

CoolSaver A/C Tune-Up Program – Residential and Commercial

The CoolSaver A/C Tune-up program utilizes specially trained air conditioning contractors to perform comprehensive A/C tune-ups for residential and commercial customers. The program pays incentives to the A/C contractor to reduce the customer's upfront cost of system diagnosis and correction. It also provides participating trade allies with training on best practices and discounts on high quality diagnostic tools.

Efficiency Connection

Efficiency Connection is an online marketplace that enables customers to shop for discounted energy efficiency products. Through the program's third-party vendor, products are delivered directly to qualifying residential customers. Program marketing informs the customer of the importance of installing LED lighting in high use areas and replacing existing incandescent, fluorescent and halogen lamps to increase savings.

Implementation Process

The Retail Electric Provider program works with REPs to recruit and enroll customers. Incentives are paid to program service providers or contractors for the average verified demand and energy savings achieved through the program.

Outreach and Research Activities

- Contracts with a third-party program implementer to conduct outreach and planning activities;
- REPs market the program to existing customers via e-mail, social media, and direct mail; and

- Participating contractors may do direct marketing to customers via e-mail, direct mail, and flyers

Smart Thermostat Program

Program Design

The Smart Thermostat Program enables customers to receive discounts for the purchase of ENERGY STAR®⁸ Certified Smart Thermostats at online retail locations.

Implementation Process

The program utilizes two methods for purchase, an online marketplace promoted by REPs and an internet portal that offers an instant coupon code and allows customers to shop for discounted energy efficiency products.

Outreach and Research Activities

- Contracts with third-party internet marketplace and online portals; and
- Implements in-store marketing materials with participating retailers.

Residential Load Management Standard Offer Program

Program Design

The Residential Load Management program provides demand reduction during the summer peak period, when ERCOT issues an EEA2. Participants are randomly tested twice during the summer peak period and agree to be available for up to five additional demand response events. Events may last from one to four hours and may be initiated Monday through Friday between the hours of 1:00 pm and 7:00 pm, excluding federal holidays. The program begins June 1 and ends on September 30.

Implementation Process

The Residential Load Management program sponsors utilize CenterPoint Houston's energy efficiency database to enroll customers who own a Wi-Fi enabled device that can provide curtailment during energy saving events.

Outreach and Research Activities

⁸ ENERGY STAR® is the government-backed symbol for energy efficiency, providing simple, credible, and unbiased information that consumers and businesses rely on to make well-informed decisions. Environmental Protection Agency (EPA) ensures that each product that earns the label is independently certified to deliver the quality, performance, and savings that consumers have come to expect. Website: <https://www.energystar.gov/>

- Maintains internet website with detailed project eligibility, end-use measures, incentive structure, procedures, application forms and list of third-party program sponsors; and
- CenterPoint Houston works with aggregators and vendors to enroll customers who wish to participate.

CenterPoint Energy High Efficiency Home MTP

Program Design

The High Efficiency Home MTP incentivizes the construction of new ENERGY STAR[®] certified, DOE Zero Energy Ready, and other high efficiency qualified homes. To qualify for incentives, all homes at a minimum must achieve 10% or 750 more kWh savings over the 2015 IECC reference baseline home. Incentives can also be earned by meeting minimum prescriptive technology requirements such as high efficiency HVAC systems, and above code attic and wall insulation. An additional bonus will be offered for those builders who build ENERGY STAR[®] version 3.1 certified homes. Each home is reviewed for verifiable demand and energy savings.

Outreach and Research Activities

- Contracts with a third-party program implementer to conduct outreach, training and technical assistance; and
- Advertise using a multitude of media, including, digital media, local TV, search engine optimization, online and targeted relocation publications, and local home builder association publications.

Residential & Small Commercial Standard Offer Program

Program Design

The Residential & Small Commercial SOP targets retrofit measures for residential and small commercial customers with incentives being paid to project sponsors for qualifying measures that provide verifiable demand and energy savings. The program is open to all qualifying energy efficiency measures, including, but not limited to, air conditioning, duct sealing, weatherization, ceiling insulation, water saving measures, solar photovoltaics, and ENERGY STAR[®] appliances.

Implementation Process

Any registered project sponsor may apply for a project meeting the minimum requirements. Program information is provided on CenterPoint Houston's website.

Outreach and Research Activities

- Maintains internet website with detailed project eligibility, end-use measures, incentive structure, procedures, and application forms.

Advanced Lighting MTP

Program Design

This program offers point of purchase discounts to residential customers at participating retail stores for the purchase of qualified (i.e., ENERGY STAR[®] rated) high efficiency LED lighting products.

Implementation Process

The Advanced Lighting MTP is implemented by a third-party program implementer. Point of purchase discounts will be applied to residential customers at participating retailers, including Home Depot, Lowes, and Sam's Club. Five percent of the savings and cost associated with the Advanced Lighting MTP will be allocated to the commercial sector. The program is administered as a single program, but the savings and cost are detailed by segment throughout this document.

Outreach and Research Activities

- In-store promotions of the program via signage; and
- Participates in appropriate industry-related meetings and events to generate awareness and interest.

Mid-Stream MTP

Program Design

The Mid-Stream MTP (HVAC and Pool Pump Distributor) provides incentives to air conditioning and pool pump distributors who agree to facilitate the installation of high-efficiency pool pumps, air conditioners, heat pumps, smart thermostats, and heat pump water heaters in existing single-family and multi-family properties.

Implementation Process

Any registered HVAC, pool pump, or plumbing distributor may apply for participation in the program. Program information is provided on CenterPoint Houston's website.

Outreach and Research Activities

- Contracts with a third-party program implementer to conduct outreach, marketing, and planning activities; and
- Conducts workshops as necessary to explain elements such as responsibilities of the distributors and contractors, program requirements, incentive information, and the application and reporting process.

Hard-To-Reach Standard Offer Program

Program Design

The Hard-to-Reach Standard Offer Program provides incentives to project sponsors for qualifying measures installed in retrofit applications which provide verifiable demand and energy savings to customers whose annual total household income is less than 200% of current federal poverty guidelines. Qualifying energy efficiency measures include, but are not limited to, air conditioning, AC tune-ups, duct sealing, weatherization, ceiling insulation, water saving measures, and ENERGY STAR® windows.

Implementation Process

Any registered project sponsor may apply for a project meeting the minimum requirements. Program information is provided on CenterPoint Houston's website.

Outreach and Research Activities

- Maintain an internet website with detailed project eligibility, end-use measures, incentive structure, procedures, and application forms; and
- Conduct workshops as necessary to explain elements such as responsibilities of the project sponsor, project requirements, incentive information, and the application and reporting process.

Multi-Family MTP Market Rate

Program Design

The Multi-family MTP Market Rate encompasses two program elements: Multi-family Water and Space Heating and Multi-Family High Efficiency New Construction. Multi-family Water and Space Heating promotes the installation of energy efficient non-electric water heating in multi-family housing developments. Multi-family High Efficiency New Construction incentivizes energy efficiency in new multi-family buildings.

Implementation Process

The program is implemented through a third-party implementer. Program information is provided on CenterPoint Energy Houston's website.

Outreach and Research Activities

- Contracts with a third-party program implementer to conduct outreach and planning; and
- Marketing materials including brochures, cut sheets and program guidebook provided to potential participating developers and property managers.

Multi-family MTP Hard-to-Reach

Program Design

The Multi-family MTP Hard-to-Reach encompasses three program elements: Multi-family Water and Space Heating, Multi-family High Efficiency New Construction, and Direct Install (DI). Multi-family Water and Space Heating promotes the installation of energy efficient non-electric water heating in multi-family housing developments. Multi-family High Efficiency New Construction incentivizes energy efficiency in new multi-family buildings. The Multi-Family Direct Install element offers property owners and managers a free visual audit of existing units to see if the property is eligible for energy efficient direct installation measures, which may include CFLs / LED lights and water saving measures. These three elements are only available to properties with tenants whose annual total household income is less than 200% of current federal poverty guidelines. In the DI element, applicable measures will be installed at no cost and include an educational component for those eligible.

Outreach and Research Activities

- Contracts with a third-party program implementer to implement outreach and planning; and
- Marketing materials including brochures, cut sheets and program guidebook provided to potential participating developers and property managers.

Targeted Low-Income MTP (Agencies in Action)

Program Design

The Targeted Low-Income MTP facilitates the installation of energy efficiency upgrades for low-income residential customers in single family or multi-family homes. Local non-profit organizations and energy service companies provide comprehensive, whole-house retrofits that maximize electricity savings to

homes with a Savings to Investment Ratio (SIR) greater than one (1). This is accomplished by installing attic insulation, solar screens, lighting retrofits, water saving measures, ENERGY STAR® room air conditioners, central air conditioning systems, ENERGY STAR® refrigerators, and air infiltration control for participants that have an annual household income of less than 200% of the federal poverty guidelines. A maximum expenditure of \$7,541 is allowed per home.

Implementation Process

CenterPoint Houston contracts with a program implementer that has the responsibility of recruiting and overseeing the participating agencies and energy service companies. An energy audit using the National Energy Audit Assessment Tool (NEAT) is performed at the premise and the SIR score determines which projects are selected for renovation.

Outreach and Research Activities

- Partner with a third-party implementer; and
- Contact non-profit organizations for potential participation.

Commercial High Efficiency Foodservice MTP (Pilot)

Program Design

The Commercial High Efficiency Foodservice Pilot is a midstream Market Transformation Program designed to influence and incentivize the adoption of energy-efficient commercial kitchen equipment measures recently approved in the TRM. This program targets small and mid-sized business segments including restaurants, schools, quick service restaurants, government facilities, and other customers that utilize commercial food service equipment.

Implementation Process

CenterPoint Houston contracts with a program implementer that has the responsibility of recruiting and overseeing the participating agencies and energy service companies. The program provides instant point of sale (POS) incentives on electric energy-efficient commercial kitchen equipment for Houston area businesses purchased through participating distributors. Eligible equipment includes dishwashers, ice makers, ovens, fryers, steam cookers, hot food holding cabinets, refrigerators, and freezers.

Outreach and Research Activities

- Partner with a third-party implementer to assist with delivery;

- Recruitment of vendors to join the program's Market Partner Network of participating sponsors.
- Participate in appropriate industry-related meetings and events to generate awareness and interest.
- Provide marketing materials including brochures, program fact sheets, and more to potential participants.

Research and Development (R&D) Projects

In 2022, CenterPoint Houston has identified the following R&D activities. Additional projects may be implemented depending on research opportunities and the availability of budgeted R&D funds.

- **Commercial Smart Thermostat**

CenterPoint Houston plans to continue evaluating the energy savings potential for ENERGY STAR® Smart Thermostats in commercial buildings. This R&D project focuses on building types that do not traditionally have Building Management or Automation Systems installed, such as convenience stores, converted residences, retail stores, and strip malls.

C. New Programs for 2022

CenterPoint Houston does not plan to implement any new programs in 2022.

D. Potential New Programs for 2023

Currently, CenterPoint Houston does not plan to implement any new programs in 2023.

II. Customer Classes

CenterPoint Houston's energy efficiency programs target the Hard-to-Reach, Residential, and Commercial customer classes.

The annual MW savings goal will be allocated to customer classes by examining historical program results, evaluating economic trends, and considering 16 TAC § 25.181(e)(3)(F) and (p), which respectively state that no less than 5% of the utility's total demand reduction savings goal should be achieved through programs for hard-to-reach customers and no less than 10% of the energy efficiency budget is to be spent on targeted low-income programs. Table 3 summarizes the number of customers in each of the customer classes. It should be noted, however, that the actual distribution of the goal and budget must remain flexible based upon the response of the marketplace and the overriding objective of meeting legislative and Commission goals.

Table 3: Summary of Customer Classes⁹

Customer Class	Number of Customers
Commercial	301,547
Residential	1,743,425
Hard to Reach ¹⁰	615,743

⁹ The values in Table 3 are based on CenterPoint Houston's Residential and Commercial customer counts as of 12/31/2021.

¹⁰ CenterPoint Houston does not require income information for electric service and no records are available to correlate revenue for the Hard-to-Reach customer class. However, according to the U.S. Census Bureau, Current Population Survey 2021 Annual Social and Economic Supplement, 26.1% of Texas families fall below 200% of the poverty threshold. Applying that percentage to CenterPoint Houston's residential customer totals, the number of HTR customers is estimated at 615,743. Program goals will be based on the requirement in the energy efficiency rule that no less than 5% of the total energy efficiency demand goal will be achieved through the programs in the Hard-to-Reach customer class.

III. Energy Efficiency Goals and Projected Savings

As prescribed by 16 TAC § 25.181, CenterPoint Houston's demand goal for 2022 is 0.4% of peak demand. For the purposes of this report, the 2022 demand goal is based on the 5-year average of weather adjusted peak demand for 2016-2020, and the 2023 demand goal is based on the 5-year average of weather adjusted peak demand for 2017-2021. The corresponding energy savings goals are determined by applying a 20 percent capacity factor to the demand savings goals.

Table 4 presents historical annual peak demand for 2016-2021 and estimated peak demand for 2022 and 2023. Table 5 presents the corresponding projected demand and energy savings broken out by program for each customer class for 2022 and 2023. The projected savings is the demand and energy savings that can be achieved based on the annual budget shown in Table 6. The kW and kWh values presented in Table 5 are at the customer meter and include line loss factors used in the latest CenterPoint Houston electric base rate case, Docket No. 49421.

Table 4: Annual Growth in Demand and Energy Consumption

Calendar Year	Peak Demand (MW)				Energy Consumption (GWh)			
	Total System		Residential & Commercial		Total System		Residential & Commercial	
	Actual ¹¹	Weather Adjusted ^{12,13}	Actual	Weather Adjusted	Actual	Weather Adjusted	Actual	Weather Adjusted
2016	17,957	18,201	15,731	15,975	91,322	91,336	72,022	72,036
2017	18,364	18,611	16,236	15,665	92,593	93,480	76,652	72,449
2018	19,125	18,662	16,726	16,078	94,736	94,889	72,668	72,821
2019	18,915	19,684	16,525	16,226	94,654	93,787	71,644	70,777
2020	18,793	19,136	16,807	17,150	97,771	97,460	71,147	70,836
2021	18,595	19,376	15,463	16,244	99,336	98,760	71,082	70,505
2022	20,259	N/A ¹⁴	16,798	N/A	103,919	N/A	103,919	N/A
2023	20,736		17,211		105,545		105,545	

2022 Goals¹⁵

MW Goal = $16,219 \times 0.4\% = 64.88$ MW

MWh Goal = $64.88 \text{ MW} \times 8760 \text{ Hours} \times 20\% \text{ Load Factor} = 113,670$ MWh

2023 Goals

MW Goal = $16,273 \times 0.4\% = 65.09$ MW

MWh Goal = $65.09 \text{ MW} \times 8760 \text{ Hours} \times 20\% \text{ Load Factor} = 114,038$ MWh

¹¹ 2022 and 2023 Calendar Year “Actual” values are forecasted.

¹² “Actual Weather Adjusted” Peak Demand is “Actual” Peak Demand adjusted for weather fluctuations using weather data for the most recent ten years.

¹³ Weather adjustment calculations are based on hourly weather data from NOAA’s Quality Controlled Local Climatological Data (QCLCD).

¹⁴ NA = Not Applicable: Energy efficiency goals are calculated based upon the actual weather-adjusted growth in demand.

¹⁵ Demand goals for 2022 and 2023 are provided at the meter level. Source level demand goals are 68.59 MW for 2022 and 68.81 MW for 2023. The source values were determined by applying a line loss factor of 5.71%.

Table 5: Projected Demand and Energy Savings Broken Out by Program for Each Customer Class (at Meter)

Program Goals by Customer Class for 2022 and 2023	2022		2023	
	Projected Savings (KW) at Meter	Projected Savings (kWh) at Meter	Projected Savings (kW) at Meter	Projected Savings (kWh) at Meter
Large Commercial	131,813	118,611,411	133,775	134,550,000
Commercial Standard Offer Program	13,200	70,000,000	13,200	70,000,000
Commercial MTP (SCORE, Healthcare, Data Center)	6,100	34,000,000	7,500	48,500,000
Commercial Load Management Standard Offer Program	110,000	660,000	110,000	660,000
Retro-Commissioning MTP	1,378	7,092,000	1,350	7,090,000
REP MTP (Commercial CoolSaver)	375	979,194	975	2,500,000
Commercial High Efficiency Foodservice MTP	510	4,380,217	500	4,300,000
Advanced Lighting Commercial MTP	250	1,500,000	250	1,500,000
Residential and Small Commercial	45,514	84,984,379	45,507	82,586,000
Advanced Lighting Residential MTP	4,750	28,500,000	4,750	28,500,000
CenterPoint Energy High Efficiency Home MTP	9,422	25,537,300	9,422	25,000,000
Residential & Small Commercial Standard Offer Program	535	1,400,000	535	1,400,000
Smart Thermostat Program	-	6,556,000	-	4,765,000
Midstream MTP (HVAC and Pool Pump Distributor)	3,500	9,855,000	3,500	9,855,000
REP MTP (Residential CoolSaver and Efficiency Connection)	2,807	7,470,079	2,800	7,400,000
Residential Load Management Standard Offer Program	22,000	66,000	22,000	66,000
Multi-Family MTP Market Rate	2,500	5,600,000	2,500	5,600,000
Hard-to-Reach	6,129	10,533,400	6,150	10,500,000
Hard-to-Reach Standard Offer Program	875	1,000,000	875	1,000,000
Multi-Family MTP Hard-to-Reach	275	1,500,000	275	1,500,000
Targeted Low Income MTP (Agencies in Action)	4,979	8,033,400	5,000	8,000,000
TOTAL	183,456	214,129,190	185,432	227,636,000

IV. Program Budgets

Table 6 presents proposed budget allocations required to achieve the projected demand and energy savings for calendar years 2022 and 2023. The budget allocations are a result of the projected demand and energy savings presented in Table 5. The budget allocations presented in Table 6 include incentive and administration costs for each program and customer class.

Table 6: Proposed Annual Budget Broken Out by Program for Each Customer Class

Program Estimated Budget by Customer Class for 2022 and 2023	2022			2023		
	Incentives	Admin	Total Budget	Incentives	Admin	Total Budget
Large Commercial	\$17,290,030	\$1,896,369	\$19,186,399	\$17,290,046	\$1,646,997	\$18,937,044
Commercial Standard Offer Program	\$6,200,000	\$872,047	\$7,072,047	\$6,000,000	\$754,797	\$6,754,797
Commercial MTP (SCORE, Healthcare, Data Center)	\$5,900,000	\$551,130	\$6,451,130	\$5,900,000	\$486,590	\$6,386,590
Commercial Load Management Standard Offer Program	\$3,300,000	\$274,645	\$3,574,645	\$3,300,046	\$208,590	\$3,508,636
Retro-Commissioning MTP	\$900,000	\$118,582	\$1,018,582	\$900,000	\$80,335	\$980,335
REP MTP (Commercial CoolSaver)	\$125,030	\$14,194	\$139,224	\$325,000	\$27,004	\$352,004
Commercial High Efficiency Foodservice MTP	\$815,000	\$61,300	\$876,300	\$815,000	\$84,429	\$899,429
Advanced Lighting Commercial MTP	\$50,000	\$4,471	\$54,471	\$50,000	\$5,253	\$55,253
Residential and Small Commercial	\$11,208,674	\$1,191,997	\$12,400,671	\$11,000,000	\$914,504	\$11,914,504
Advanced Lighting Residential MTP	\$950,000	\$84,955	\$1,034,955	\$950,000	\$73,310	\$1,023,310
CenterPoint Energy High Efficiency Home MTP	\$4,000,000	\$477,856	\$4,477,856	\$4,000,000	\$310,155	\$4,310,155
Residential & Small Commercial Standard Offer Program	\$300,000	\$56,591	\$356,591	\$300,000	\$87,872	\$387,872
Smart Thermostat Program	\$555,940	\$89,784	\$645,724	\$400,000	\$30,909	\$430,909
Midstream MTP (HVAC and Pool Pump Distributor)	\$2,500,000	\$272,443	\$2,772,443	\$2,500,000	\$178,898	\$2,678,898
REP MTP (Residential CoolSaver and Efficiency Connection)	\$1,202,734	\$96,045	\$1,298,779	\$1,150,000	\$69,959	\$1,219,959
Residential Load Management Standard Offer Program	\$900,000	\$72,800	\$972,800	\$900,000	\$73,409	\$973,409
Multi-Family MTP Market Rate	\$800,000	\$41,523	\$841,523	\$800,000	\$89,991	\$889,991
Hard-to-Reach	\$4,900,000	\$726,923	\$5,626,923	\$5,000,000	\$500,272	\$5,500,272
Hard-to-Reach Standard Offer Program	\$500,000	\$127,769	\$627,769	\$500,000	\$129,989	\$629,989
Multi-Family MTP Hard-to-Reach	\$500,000	\$51,903	\$551,903	\$500,000	\$70,892	\$570,892
Targeted Low Income MTP (Agencies in Action)	\$3,900,000	\$547,251	\$4,447,251	\$4,000,000	\$299,391	\$4,299,391
SUB TOTAL	\$33,398,704	\$3,815,289	\$37,213,993	\$33,290,046	\$3,061,773	\$36,351,819
Research and Development		\$385,000	\$385,000		\$250,000	\$250,000
PROGRAM TOTAL	\$33,398,704	\$4,200,289	\$37,598,993	\$33,290,046	\$3,311,773	\$36,601,819
EM&V			\$539,688			\$522,701
EECRF PROGRAM TOTAL			\$38,138,681			\$37,124,520

Energy Efficiency Report

V. Historical Demand Savings Goals and Energy Targets for Previous Five Years

Table 7 documents CenterPoint Houston's demand reduction and energy savings targets along with actual savings achieved for the previous five years (2017 – 2021). Each value was calculated using the methods outlined in 16 TAC § 25.181.

Table 7: Historical Demand and Energy Savings Goals (at Meter)¹⁶

Calendar Year	Weather Adjusted Demand Goal at Meter (MW)	Weather Adjusted Energy Goals at Meter (MWh)	Actual Demand Savings at Meter (MW)	Actual Weather Adjusted Energy Savings at Meter (MWh)
2021	63.69	111,585	212.30	236,837.42
2020	62.82	110,061	171.19	189,587.89
2019	61.94	108,519	194.83	215,619.87
2018	61.42	107,608	176.36	162,439.61
2017	60.42	105,856	188.42	183,438.84

¹⁶ 2021 Portfolio demand savings at the source level total 224.53 MW. The line loss values calculated for each rate class in Docket 49421 were weighted according to 2021 program participation to arrive at a final line loss value of 5.71%. This value was applied to the meter level portfolio demand savings to determine savings at the source level.

VI. Projected Savings, Reported and Verified Demand and Energy Savings

Table 8 breaks out the projected savings verified and reported demand energy savings by customer class for each program. The projected savings were reported in the Revised Energy Efficiency Plan and Report filed in June of 2021. The verified and reported savings are those savings that have been achieved and verified in the 2021 calendar year.

Table 8: Projected Savings versus Verified and Reported Savings for 2021 (at Meter)

	2021					
	Projected Savings		Verified Savings		Reported / Verified	
	kW	kWh	kW	kWh	kW	kWh
Large Commercial	128,077	140,455,616	155,749.9	124,489,296.4	155,749.9	124,489,296.4
Commercial Standard Offer Program	11,700	75,000,000	12,582.3	63,331,068.0	12,582.3	63,331,068.0
Commercial MTP (SCORE, Healthcare, Data Center)	7,300	47,500,000	7,536.9	42,996,078.0	7,536.9	42,996,078.0
Commercial Load Management Standard Offer Program	104,761	628,566	130,970.5	785,823.2	130,970.5	785,823.2
Retro-Commissioning MTP	3,100	10,800,000	665.5	10,039,396.0	665.5	10,039,396.0
REP MTP (Commercial CoolSaver)	550	1,400,000	3,555.6	4,725,671.0	3,555.6	4,725,671.0
Commercial High Efficiency Foodservice MTP	470	4,082,215	116.7	813,510.0	116.7	813,510.0
Advanced Lighting Commercial MTP	196	1,044,835	322.4	1,797,750.3	322.4	1,797,750.3
Residential and Small Commercial	37,975	62,358,700	51,059.6	103,278,293.6	51,059.6	103,278,293.6
Advanced Lighting Residential MTP	3,725	19,851,862	6,125.5	34,157,254.9	6,125.5	34,157,254.9
CenterPoint Energy High Efficiency Home MTP	8,000	17,500,000	13,599.6	36,822,715.0	13,599.6	36,822,715.0
Residential & Small Commercial Standard Offer Program	600	1,000,000	278.9	897,036.0	278.9	897,036.0
Smart Thermostat Program	-	3,800,000	-	4,571,320.0	-	4,571,320.0
Midstream MTP (HVAC and Pool Pump Distributor)	3,500	9,855,000	3,492.1	13,373,297.2	3,492.1	13,373,297.2
REP MTP (Residential CoolSaver and Efficiency Connection)	2,600	7,000,000	1,677.1	6,387,410.0	1,677.1	6,387,410.0
Residential Load Management Standard Offer Program	17,550	105,300	24,112.0	144,672.0	24,112.0	144,672.0
Multi-Family MTP Market Rate	2,000	3,200,000	1,774.5	6,924,588.4	1,774.5	6,924,588.4
Smart Home Energy Management System (Pilot)	-	46,538	-	-	-	-
Hard-to-Reach	5,578	9,088,598	5,491.8	9,069,825.8	5,491.8	9,069,825.8
Hard-to-Reach Standard Offer Program	876	915,251	656.1	918,309.2	656.1	918,309.2
Multi-Family MTP Hard-to-Reach	325	645,000	71.1	523,668.1	71.1	523,668.1
Targeted Low Income MTP (Agencies in Action)	4,377	7,528,347	4,764.5	7,627,848.5	4,764.5	7,627,848.5
TOTAL	171,630	211,902,914	212,301	236,837,416	212,301	236,837,416

Table 9: Projected Savings versus Reported and Verified Savings for 2020 (at Meter)

	2020					
	Projected Savings		Verified Savings		Reported / Verified	
	kW	kWh	kW	kWh	kW	kWh
Large Commercial	120,275	127,713,774	119,315	93,595,331	119,315	93,595,331
Commercial Standard Offer Program	11,700	75,000,000	11,119	52,855,686	11,119	52,855,686
Commercial MTP (SCORE, Healthcare, Data Center)	7,100	40,000,000	6,626	31,296,349	6,626	31,296,349
Commercial Load Management Standard Offer Program	98,000	590,000	99,493	596,959	99,493	596,959
Retro-Commissioning MTP	3,100	10,800,000	1,261	6,491,215	1,261	6,491,215
REP MTP (Commercial CoolSaver)	226	699,341	509	644,644	509	644,644
Advanced Lighting Commercial MTP	149	624,433	307	1,710,478	307	1,710,478
Residential and Small Commercial	35,632	52,809,100	46,328	87,542,764	46,328	87,542,764
Advanced Lighting Residential MTP	2,823	11,864,230	5,828	32,499,087	5,828	32,499,087
CenterPoint Energy High Efficiency Home MTP	8,000	17,500,000	11,020	29,870,174	11,020	29,870,174
Residential & Small Commercial Standard Offer Program	660	1,200,000	480	1,286,822	480	1,286,822
Smart Thermostat Program	-	4,470,000	-	2,741,600	-	2,741,600
Midstream MTP (HVAC and Pool Pump Distributor)	3,500	9,855,000	3,516	10,308,961	3,516	10,308,961
REP MTP (Residential CoolSaver and Efficiency Connection)	1,900	5,900,000	1,089	3,388,349	1,089	3,388,349
Residential Load Management Standard Offer Program	17,550	105,300	20,552	123,312	20,552	123,312
Multi-Family MTP Market Rate	1,199	1,914,570	3,843	7,324,460	3,843	7,324,460
Smart Home Energy Management System (Pilot)	-	46,538	-	-	-	-
Hard-to-Reach	5,850	8,912,129	5,855	9,788,146	5,855	9,788,146
Hard-to-Reach Standard Offer Program	876	97,700	864	1,023,277	864	1,023,277
Multi-Family MTP Hard-to-Reach	597	1,286,082	172	990,290	172	990,290
Targeted Low Income MTP (Agencies in Action)	4,377	7,528,347	4,818	7,774,579	4,818	7,774,579
TOTAL	161,757	189,435,003	171,497	190,926,242	171,497	190,926,242

VII. Historical Program Expenditures

This section documents CenterPoint Houston's incentive and administration expenditures for the previous five years (2017 – 2021) broken out by program for each customer class. Administrative costs do not include Evaluation Measurement and Verification (EM&V) or rate case expenses.

Table 10: Historical Program Incentive and Administrative Expenditures (2017 – 2021)¹⁷

Historical Statutory Program Funding by Customer Class	2021		2020		2019		2018		2017	
	Incentives	Admin	Incentives	Admin	Incentives	Admin	Incentives	Admin	Incentives	Admin
Large Commercial	\$16,794,377	\$1,632,356	\$15,780,391	\$1,910,090	\$15,567,811	\$1,943,656	\$13,339,628	\$1,825,309	\$13,090,927	\$1,621,148
Commercial Standard Offer Program	\$5,522,351	\$788,692	\$5,904,584	\$923,090	\$4,633,580	\$901,274	\$3,353,840	\$897,987	\$4,239,883	\$846,554
Commercial MTP (SCORE, Healthcare, Data Center)	\$5,954,620	\$455,725	\$5,598,306	\$518,241	\$6,631,359	\$550,456	\$5,474,005	\$469,118	\$5,059,102	\$397,526
Commercial Load Management Standard Offer Program	\$3,294,613	\$201,212	\$3,291,908	\$250,426	\$3,300,000	\$251,352	\$3,346,334	\$264,402	\$3,027,561	\$261,179
Retro-Commissioning MTP	\$1,178,040	\$102,723	\$823,754	\$186,399	\$835,326	\$206,837	\$997,678	\$161,328	\$298,214	\$46,658
REP MTP (Commercial CoolSaver)	\$401,455	\$41,168	\$112,041	\$26,734	\$113,317	\$28,350	\$113,636	\$27,209	\$75,000	\$44,342
Commercial High Efficiency Foodservice MTP	\$390,912	\$38,266	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Advanced Lighting Commercial MTP	\$52,386	\$4,570	\$49,799	\$5,199	\$54,229	\$5,387	\$54,134	\$5,265	\$46,267	\$2,438
Sustainable Schools	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	\$344,898	\$22,450
Residential and Small Commercial	\$12,170,989	\$888,698	\$11,756,271	\$1,154,513	\$11,336,554	\$1,174,011	\$8,942,381	\$1,082,326	\$10,820,380	\$1,022,888
Advanced Lighting Residential MTP	\$995,330	\$86,821	\$946,188	\$98,786	\$1,030,358	\$102,362	\$1,028,549	\$100,040	\$879,069	\$46,330
CenterPoint Energy High Efficiency Home MTP	\$4,830,976	\$318,688	\$4,678,666	\$398,218	\$4,531,218	\$404,251	\$3,519,955	\$361,655	\$3,677,205	\$277,696
Residential & Small Commercial Standard Offer Program	\$149,926	\$53,028	\$269,497	\$78,462	\$236,247	\$84,224	\$271,258	\$82,472	\$35,832	\$107,863
Smart Thermostat Program	\$440,759	\$42,820	\$336,000	\$62,636	\$419,235	\$66,684	\$159,256	\$43,485	N/A	N/A
Midstream MTP (HVAC and Pool Pump Distributor)	\$2,471,238	\$146,151	\$2,596,986	\$186,571	\$2,304,126	\$173,374	\$1,667,306	\$179,571	\$2,827,330	\$193,395
REP MTP (Residential CoolSaver and Efficiency Connection)	\$901,936	\$62,251	\$710,111	\$121,195	\$1,457,075	\$143,891	\$1,052,474	\$133,852	\$1,678,490	\$197,396
Residential Load Management Standard Offer Program	\$910,742	\$73,707	\$835,751	\$101,045	\$833,982	\$108,931	\$838,260	\$100,999	\$778,937	\$72,943
Multi-Family MTP Market Rate	\$1,110,081	\$83,447	\$1,083,072	\$100,274	\$524,312	\$90,294	\$405,322	\$80,251	\$443,524	\$95,973
Smart Home Energy Management System (Pilot)	\$360,000	\$21,785	\$300,000	\$7,327	N/A	N/A	N/A	N/A	N/A	N/A
Energy Wise Resource Action MTP	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	\$499,992	\$31,293
Hard-to-Reach	\$4,466,130	\$385,705	\$4,605,597	\$476,152	\$4,865,369	\$498,312	\$4,861,962	\$457,654	\$4,265,535	\$477,199
Hard-to-Reach Standard Offer Program	\$391,827	\$85,804	\$498,979	\$99,869	\$1,060,339	\$114,277	\$1,075,289	\$109,943	\$320,078	\$129,723
Multi-Family MTP Hard-to-Reach	\$203,238	\$45,411	\$332,249	\$84,773	\$245,422	\$92,884	\$313,017	\$80,245	\$286,980	\$88,796
Targeted Low Income MTP (Agencies in Action)	\$3,871,065	\$254,490	\$3,774,369	\$291,509	\$3,559,609	\$291,151	\$3,473,656	\$267,466	\$3,658,477	\$258,680
Research and Development		\$127,847		\$318,228		\$393,134		\$0		\$122,775
TOTAL	\$33,431,495	\$3,034,606	\$32,142,258	\$3,858,983	\$31,769,734	\$4,009,113	\$27,143,970	\$3,365,289	\$28,176,842	\$3,244,010

¹⁷ 2021 actual spending taken from Table 11 in the current EEPR; 2020, 2019, 2018, and 2017 actual spending from the Revised 2021 EEPR filed in June 2021 under Project 51672.

VIII. Program Funding for Calendar Year 2021

As shown on Table 11, CenterPoint Houston spent a total of \$36,466,101 on energy efficiency programs in 2021. This was less than the budgeted \$38,252,585. Changes to individual program budgets that resulted in greater than 10% increases or decreases are described below.

- The Commercial Standard Offer Program spent an additional 11% in 2021. Following two program years in which spending was less than projected, 2021 proved to be a strong year for program impacts and spending. The Commercial Standard Offer program experienced a solid pipeline of project opportunities in 2021, and the Company worked with program participants to secure these projects and capture cost-effective energy and demand savings. Unspent funding from the Commercial MTP was shifted to the Commercial Standard Offer Program.
- The Commercial MTP spent 14% less than budgeted in 2021, and unspent funding from the Commercial MTP was utilized in the Commercial Standard Offer Program. Despite underspending, the Commercial MTP performed well in 2021, exceeding projected demand reduction and reaching 91% of planned energy savings.
- REP MTP (Commercial CoolSaver) exceeded the planned budget by 311%, and this was due to high demand for HVAC tune-ups at commercial facilities. CenterPoint Houston was able to capture these commercial HVAC opportunities by shifting funds from the Residential REP MTP which did not reach its projected spend for 2021. The additional funding allowed the program to exceed expected demand reduction by nearly 650% and expected energy savings by nearly 340%.
- The Commercial High Efficiency Foodservice MTP, CenterPoint Houston's newest addition to its Energy Efficiency Portfolio, spent 51% less than budgeted. 2021 marked the first year of implementation for this program, and it required a ramp-up period to build market awareness and garner participation. While program spending and impacts were lower than planned, the Company is encouraged by the growth seen in participation and measure comprehensiveness from the initial launch to the 4th quarter of 2021
- Residential & Small Commercial Standard Offer Program underspent the planned budget by 43% in 2021, and the excess funding was moved to other programs. While the program continues to serve as a good channel to promote the installation of measures such as efficient HVAC systems and solar panels, overall participation, spending, and savings has seen a decline. CenterPoint

Houston has faced similar challenges through the Hard-to-Reach Standard Offer Program and is working to increase sponsor participation and capture more projects through both offerings.

- The High Efficiency Home MTP experienced a very successful year in 2021. The program spent an additional 27% in 2021 and was able to leverage funds not utilized in other residential programs.
- The Multi-Family HTR MTP spent 25% less than budgeted for 2021 due to a lack of opportunities for multi-family water and space heating and high efficiency new construction projects in properties that qualify as Hard-to-Reach. CenterPoint Houston did, however, utilize the direct-install component of the program to incentivize installation of energy efficient equipment in multi-family housing complexes.
- In 2021, the Multi-Family Market Rate MTP again experienced a strong pipeline of projects and exceeded spending projections. Funds from underspent programs were leveraged to support these projects allowing the program to spend an additional 13% over budget plan.
- The Smart Thermostat Program was 19% under budget in 2021, but the program did see a significant increase in participation, spending and energy savings from the 2020 program year.
- Participation in the REP MTP (Residential CoolSaver and Efficiency Connection) was lower than expected in 2021, and spending was 31% less than projected. Due to high demand for commercial HVAC tune-ups, funding from the Residential REP MTP was shifted to the Commercial REP MTP.
- Hard-to-Reach Standard Offer Program underspent by 24%. Maintaining and growing a solid level of participation and energy savings has remained a challenge in this program. The Company is working to improve outreach and align incentives to increase participation and promote more comprehensive retrofits that drive higher energy and demand savings for Hard-to-Reach customers.
- In 2021, the Targeted Low Income MTP (Agencies in Action) spent 16% less than budgeted, but the program exceeded projections for demand reduction and energy savings. The program also spent the required 10% of the Company's energy efficiency budget for 2021.

Table 11: Program Funding for Calendar Year 2021

Program Funding for Calendar Year 2021	Number of Customer Meters	Forecasted Budget	Actuals Funds Expended (Incentives)	Actuals Funds Expended (Admin)	Total Funds Expended	Funds Committed (Not Expended)	Funds Remaining (Not Committed)	Percentage Change From Budgeted/ Actual
Large Commercial	1,093	\$ 19,207,600	\$ 16,794,377	\$ 1,632,356	\$ 18,426,732	\$ -	\$ (780,867)	-4%
Commercial Standard Offer Program	271	\$ 5,703,264	\$ 5,522,351	\$ 788,692	\$ 6,311,043	\$ -	\$ 607,780	11%
Commercial MTP (SCORE, Healthcare, Data Center)	142	\$ 7,482,324	\$ 5,954,620	\$ 455,725	\$ 6,410,345	\$ -	\$ (1,071,978)	-14%
Commercial Load Management Standard Offer Program	303	\$ 3,623,112	\$ 3,294,613	\$ 201,212	\$ 3,495,825	\$ -	\$ (127,287)	-4%
Retro-Commissioning MTP	20	\$ 1,358,109	\$ 1,178,040	\$ 102,723	\$ 1,280,763	\$ -	\$ (77,346)	-6%
REP MTP (Commercial CoolSaver)	120	\$ 107,568	\$ 401,455	\$ 41,168	\$ 442,622	\$ -	\$ 335,054	311%
Commercial High Efficiency Foodservice MTP	237	\$ 876,300	\$ 390,912	\$ 38,266	\$ 429,178	\$ -	\$ (447,122)	-51%
Advanced Lighting Commercial MTP	N/A	\$ 56,923	\$ 52,386	\$ 4,570	\$ 56,955	\$ -	\$ 33	0%
Residential and Small Commercial	43,902	\$ 12,692,725	\$ 12,170,989	\$ 888,698	\$ 13,059,687	\$ -	\$ 366,962	3%
Advanced Lighting Residential MTP	N/A	\$ 1,081,528	\$ 995,330	\$ 86,821	\$ 1,082,152	\$ -	\$ 624	0%
CenterPoint Energy High Efficiency Home MTP	10,636	\$ 4,052,706	\$ 4,830,976	\$ 318,688	\$ 5,149,665	\$ -	\$ 1,096,959	27%
Residential & Small Commercial Standard Offer Program	274	\$ 356,591	\$ 149,926	\$ 53,028	\$ 202,954	\$ -	\$ (153,637)	-43%
Smart Thermostat Program	3,463	\$ 595,000	\$ 440,759	\$ 42,820	\$ 483,579	\$ -	\$ (111,421)	-19%
Midstream MTP (HVAC and Pool Pump Distributor)	3,580	\$ 2,840,553	\$ 2,471,238	\$ 146,151	\$ 2,617,389	\$ -	\$ (223,164)	-8%
REP MTP (Residential CoolSaver and Efficiency Connection)	3,035	\$ 1,403,812	\$ 901,936	\$ 62,251	\$ 964,187	\$ -	\$ (439,625)	-31%
Residential Load Management Standard Offer Program	21,492	\$ 972,800	\$ 910,742	\$ 73,707	\$ 984,449	\$ -	\$ 11,649	1%
Multi-Family MTP Market Rate	1,422	\$ 1,051,903	\$ 1,110,081	\$ 83,447	\$ 1,193,528	\$ -	\$ 141,625	13%
Smart Home Energy Management System (Pilot)	0	\$ 337,832	\$ 360,000	\$ 21,785	\$ 381,785	\$ -	\$ 43,953	13%
Hard-to-Reach	2,630	\$ 5,852,260	\$ 4,466,130	\$ 385,705	\$ 4,851,835	\$ -	\$ (1,000,425)	-17%
Hard-to-Reach Standard Offer Program	296	\$ 627,769	\$ 391,827	\$ 85,804	\$ 477,631	\$ -	\$ (150,137)	-24%
Multi-Family MTP Hard-to-Reach	180	\$ 331,142	\$ 203,238	\$ 45,411	\$ 248,649	\$ -	\$ (82,493)	-25%
Targeted Low Income MTP (Agencies in Action)	2,154	\$ 4,893,350	\$ 3,871,065	\$ 254,490	\$ 4,125,555	\$ -	\$ (767,795)	-16%
SUB TOTAL	47,625	\$ 37,752,585	\$ 33,431,495	\$ 2,906,759	\$ 36,338,255	\$ -	\$ (1,414,331)	-4%
Research and Development		\$ 500,000	\$ -	\$ 127,847	\$ 127,847	\$ -	\$ (372,153)	-74%
TOTAL	47,625	\$ 38,252,585	\$ 33,431,495	\$ 3,034,606	\$ 36,466,101	\$ -	\$ (1,786,484)	-5%

IX. Market Transformation Program Results

Commercial MTP

In 2021, CenterPoint Houston projected to acquire 7,300 kW and 47,500,000 kWh savings from the SCORE, HEEP, and DCEEP program offerings included in the Commercial MTP. CenterPoint Houston verified and is reporting a savings of 7,537 kW and 42,996,078 kWh.

SCORE - The SCORE program paid incentives to school districts, colleges/universities, municipal governments, county governments, and faith-based organizations. The program produced savings of 4,592 kW and 20,002,835 kWh reaching a total of 28 customers through 146 projects. 2021 energy efficiency measures completed through the program included Lighting, Chillers/HVAC, Roofing, and custom projects.

HEEP - In 2021, HEEP produced a total of 19 projects including LED installation, HVAC measures, roofing, and custom projects. The program delivered savings of 1,377 kW and 10,221,252 kWh.

DCEEP - In 2021, DCEEP delivered savings of 1,567.25 kW and 12,771,991 kWh through the implementation of eight projects. The program is comprised of new construction and retrofit applications, with incentivized measures including LED lighting, HVAC equipment and uninterruptable power supply, and motor installation.

Retro-Commissioning MTP

In 2021, CenterPoint Houston projected to acquire 3,100 kW and 10,800,000 kWh savings from this program. CenterPoint Houston verified and is reporting a savings of 665.5 kW and 10,039,396 kWh achieved through the completion of 20 retro-commissioning projects.

High Efficiency Home MTP

In 2021, CenterPoint Houston projected to acquire 8,000 kW and 17,500,000 kWh savings from this program. CenterPoint Houston verified and is reporting a savings of 13,600 kW and 36,822,715 kWh. This program drives builders to use energy efficient methods in design and construction for new single-family homes.

Advanced Lighting MTP

In 2021, CenterPoint Houston projected to acquire 3,921 kW and 20,896,697 kWh from this program. CenterPoint Houston verified and is reporting residential savings of 6,126 kW and 34,157,255 kWh, and commercial savings of 322 kW and 1,797,750 kWh.

Mid-Stream MTP

In 2021, the program included thirteen HVAC distributors that performed over 3,200 HVAC and heat pump replacements and installed 615 thermostats. Four pool pump distributors participated and performed 824 variable speed pool pump changeouts. CenterPoint Houston projected to acquire 3,500 kW and 9,855,000 kWh from this program, and reporting verified savings of 3,492 kW and 13,373,297 kWh.

Targeted Low-Income MTP (Agencies in Action)

In 2021, the program reached 2,056 homes in the CenterPoint Houston electric territory. Of these homes, 2,000 were multi-family units and 56 were single family homes. Heat pumps were the leading measure installed and made up most of incentives paid. Other measures installed included: air infiltration, attic insulation, central AC, refrigerator replacement, solar screen, wall insulation, and window AC. In 2021, CenterPoint Houston projected to acquire 4,377 kW and 7,528,347 kWh from this program. 2021 verified and reporting savings totaled 4,765 kW and 7,627,848 kWh.

Retail Electric Provider MTP

CoolSaver - The CoolSaver portion of the REP MTP program provided free comprehensive air conditioning tune-ups to residential and small commercial customers in the CenterPoint Houston Electric service territory. The program was marketed by 14 retail electric providers, and tune-ups were performed by eighteen specially trained A/C contractors. As a result, 2,245 residential A/C tune-ups and 1,210 commercial A/C tune-ups were performed in 2021

Efficiency Connection - In 2021, CenterPoint Houston continued the online Efficiency Connection website to promote and deliver energy efficient LED bulbs at a reduced price. The program was marketed by retail electric providers and yielded more than 66,000 Energy Star certified LED bulbs.

In 2021, the Company projected to capture a combined savings total of 3,150 kw and 8,400,000 kwh for the Residential and Commercial segments of the program. CenterPoint Houston verified and is reporting residential savings of 1,677 kW and 6,387,410 kWh, and commercial savings of 3,556 kW and 4,725,671 kWh.

Smart Thermostat Program

In 2021, CenterPoint Houston continued offering incentives for Energy Star Certified Smart Thermostats. Thermostats were made available to customers via an online marketplace and at participating retail stores. Customers were able to receive a cash discount by downloading an electronic coupon code for redemption at the register. In 2021, CenterPoint Houston projected savings of 3,800,000 kWh, and the program yielded savings of 4,571,320 kWh. 3,463 thermostats were incentivized through the 2021 program.

Multi-Family MTP Market Rate & Multi-Family MTP Hard-to-Reach

Multi-Family MTP Market Rate

- **Water & Space Heating** – The Water & Space Heating portion of the Multi-Family Program promotes the installation of energy efficient non-electric water heating and space heating in housing projects. In 2021, it paid incentives on eight market-rate apartment complexes with a total of 2,737 units in the CenterPoint Houston service area. These projects resulted in verified savings of 1,318 kW and 4,598,136 kWh.
- **High Efficiency New Construction** - The High Efficiency New Construction program component includes both low-and mid-rise projects to expand participation and to incorporate greater flexibility in estimating and documenting above-code energy savings. In 2021, the program incentivized the construction of ten market rate properties, with a total of 2,284 units. These projects produced verified savings of 457 kW and 2,326,453 kWh.

Multi-Family MTP Hard-to-Reach

In 2021, the Multi-Family MTP Hard-to-Reach program produced demand savings of 71 kW and 523,668 kwh through the direct installation of energy efficiency equipment at eight apartment complexes classified

as Hard-to-Reach. These direct install measures which included faucet aerators, thermostats, showerheads, and lighting, were provided at no cost to property owners or tenants.

X. Research and Development Results

Energy Efficiency Database

CenterPoint Houston's 2021 R&D activities focused on updates and enhancements to the Company's energy efficiency tracking system. Improvements were identified and implemented to improve the user-experience for contractors and program participants who utilize the system.

XI. Administrative Funds Expended

In 2021, CenterPoint Houston incurred administrative costs on categories such as continued support of its energy efficiency tracking database, employees' salaries, training, and travel, purchase of supplies, and other activities necessary and appropriate for successful program implementation. These costs meet the definition of administration costs as defined by the energy efficiency rule under 16 TAC § 25.181(g)(1) that states these type of costs "include all reasonable and necessary costs incurred by the utility in carrying out its responsibilities..." The spending in these cost categories is monitored throughout the year and mid-course corrections are made as necessary to ensure the success of our portfolio.

XII. Current Energy Efficiency Cost Recovery Factor (EECRF)

CenterPoint Houston's 2022 EECRF was approved by the Public Utility Commission of Texas in Docket No. 52194 on November 2, 2021, in the amount of \$63,052,922.

"The Commission approves CenterPoint Houston's 2022 EECRF in the amount of \$63,052,922, which is comprised of the following:

- a. CenterPoint Houston's agreed forecasted energy-efficiency costs of \$37,598,993 in program year 2022;
- b. EM&V expenses of \$539,688 for the evaluation of program year 2021;
- c. A charge of \$2,930,333 for the total under-recovery of program year 2020 energy-efficiency costs, plus \$93,456 in interest on the under-recovery amount,
- d. rate-case expenses in the total amount of \$69,063 incurred by CenterPoint Houston, the City of Houston, and the Gulf Coast Coalition of Cities in Docket 50908; and
- e. a performance bonus of \$21,821,388."

XIII. Revenue Collected Through EECRF

In 2021, CenterPoint Houston collected a total of \$44,772,626 in energy efficiency program costs through the EECRF Rider.

XIV. Over or Under-Recovery of Energy Efficiency Program Costs

In Docket No. 50908, the PUCT approved CenterPoint Houston's 2021 EECRF in the amount of \$48,796,013 consisting of:

\$38,252,585	2021 Forecasted Program Costs
\$11,435,654	2019 Bonus
-\$715,400	2019 Over-Recovery
\$541,294	2021 Forecasted EM&V Expenses
-\$750,000	Adjustment/Lower EECRF Revenue Requirement
<u>\$31,879</u>	2019 EECRF Proceeding Expenses
\$48,796,013	Total EECRF Costs

In 2021, total energy efficiency related costs were \$47,746,658 which include program expenditures of \$36,466,101, EM&V costs of \$528,424, a prior period over-recovery of \$715,400, a program year 2019 performance bonus of \$11,435,654, and 2019 EECRF Proceeding expenses of \$31,879. Total revenues collected through the EECRF Rider were \$44,772,626 resulting in overall under-recovery of \$2,974,032

XV. Under Served Counties

There were no counties within the CenterPoint Houston service territory that were under-served by the Company's energy efficiency programs in 2021. CenterPoint Houston's energy efficiency programs were accessible to all counties within the Company's electric service area. Appendix C lists the counties served by CenterPoint Houston and the amount of savings each county achieved in 2021 through the Company's energy efficiency programs.

Appendix A: Acronyms

ASHRAE	American Society of Heating, Refrigerating and Air-Conditioning Engineers
CCET	Center for the Commercialization of Electric Technologies
CLM	Commercial Load Management
DR	Demand Response
DSM	Demand Side Management
EEA	Energy Emergency Alert
EECRF	Energy Efficiency Cost Recovery Factor
EEP	Energy Efficiency Plan, which was filed as a separate document prior to April 2008
EEPR	Energy Efficiency Plan and Report
EER	Energy Efficiency Report, which was filed as a separate document prior to April 2008
ERCOT	Electric Reliability Council of Texas
HERS	Home Energy Ratings
HTR	Hard-To-Reach
IECC	International Energy Conservation Code
MTP	Market Transformation Program
PUCT	Public Utility Commission of Texas
RCx	Retro-Commissioning
REP	Retail Electrical Provider
RES	Residential
RESNET	Residential Energy Services Network
SCORE	Schools Conserving Resources
SOP	Standard Offer Program
SHEM	Smart Home Energy Management System

Appendix B: Glossary

Please refer to the glossary defined in 16 TAC § 25.181.

Appendix C: Reported Demand and Energy Reduction by County

Programs		C O U N T I E S											
		Austin	Brazoria	Chambers	Ft Bend	Galveston	Harris	Liberty	Matagorda	Montgomery	Waller	Wharton	Total
Commercial Standard Offer Program	kW	0	340	0	680	51	9,754	0	0	31	1,726	1	12,582
	kWh	0	1,587,740	0	3,591,073	299,240	50,085,732	0	0	171,293	7,590,528	5,462	63,331,068
SCORE	kW	0	203	57	148	13	4,172	0	0	0	0	0	4,592
	kWh	0	1,028,427	238,618	571,949	176,838	17,987,003	0	0	0	0	0	20,002,835
Healthcare	kW	0	0	0	70	0	1,307	0	0	0	0	0	1,377
	kWh	0	0	0	428,574	0	9,792,678	0	0	0	0	0	10,221,252
Data Centers Program	kW	0	0	0	0	0	1,567	0	0	0	0	0	1,567
	kWh	0	0	0	0	0	12,771,991	0	0	0	0	0	12,771,991
Commercial Load Management Standard Offer Program	kW	0	3,659	0	8,379	974	116,013	0	0	1,355	590	0	130,971
	kWh	0	21,956	0	50,273	5,845	696,080	0	0	8,130	3,538	0	785,823
Retro-Commissioning MTP	kW	0	0	0	0	0	665	0	0	0	0	0	665
	kWh	0	0	0	0	0	10,039,396	0	0	0	0	0	10,039,396
REP MTP (Commercial CoolSaver)	kW	0	66	0	128	26	3,128	0	0	208	0	0	3,556
	kWh	0	81,945	0	160,908	39,842	4,185,076	0	0	257,900	0	0	4,725,671
Commercial High Efficiency Foodservice MTP	kW	0	1	0	19	1	93	0	0	1	0	0	117
	kWh	0	11,020	0	119,076	10,699	660,681	0	0	9,051	2,982	0	813,510
Advanced Lighting Commercial MTP	kW	0	10	0	56	15	229	0	0	12	0	0	322
	kWh	0	58,194	0	309,532	85,728	1,279,360	0	0	64,936	0	0	1,797,750
Advanced Lighting Residential MTP	kW	0	198	0	1,055	292	4,359	0	0	221	0	0	6,125
	kWh	0	1,105,687	0	5,881,102	1,628,837	24,307,846	0	0	1,233,783	0	0	34,157,255
CenterPoint Energy High Efficiency Home MTP	kW	9	380	15	5,191	80	6,660	41	0	807	416	2	13,600
	kWh	39,515	1,076,355	104,285	14,394,561	266,273	17,654,001	56,308	0	2,122,129	1,097,935	11,352	36,822,715
Residential and Small Commercial Standard Offer Program	kW	18	10	0	29	11	205	0	0	3	1	1	279
	kWh	37,258	21,781	0	105,739	23,442	691,791	0	0	14,473	1,029	1,524	897,036
Smart Thermostat Program	kW	0	0	0	0	0	0	0	0	0	0	0	0
	kWh	2,384	253,896	21,456	963,136	90,592	3,112,312	2,384	0	115,624	7,152	2,384	4,571,320
Midstream MTP (HVAC and Pool Pump Distributor)	kW	0	293	11	593	44	2,356	0	0	136	9	50	3,492
	kWh	0	813,727	45,133	2,328,708	107,833	9,242,309	0	0	679,932	61,218	94,436	13,373,297
REP MTP (Residential CoolSaver and Efficiency Connection)	kW	3	60	1	337	8	1,226	0	0	38	2	2	1,677
	kWh	13,666	237,070	4,862	1,282,432	40,861	4,639,295	1,234	0	151,680	6,599	9,711	6,387,410
Residential Load Management Standard Offer Program	kW	33	1,372	137	4,369	247	16,956	6	0	922	55	16	24,112
	kWh	198	8,230	821	26,212	1,481	101,738	36	0	5,534	328	94	144,672
Multi-Family MTP Market Rate	kW	0	0	0	0	0	1,775	0	0	0	0	0	1,775
	kWh	0	0	0	0	0	6,924,588	0	0	0	0	0	6,924,588
Smart Home Energy Management System (Pilot)	kW	0	0	0	0	0	0	0	0	0	0	0	0
	kWh	0	0	0	0	0	0	0	0	0	0	0	0
Hard-to-Reach Standard Offer Program	kW	0	2	0	0	9	645	0	0	0	0	0	656
	kWh	0	1,444	0	0	15,667	901,198	0	0	0	0	0	918,309
Multi-Family MTP Hard-to-Reach	kW	0	0	0	0	0	71	0	0	0	0	0	71
	kWh	0	0	0	0	0	523,668	0	0	0	0	0	523,668
Targeted Low Income MTP (Agencies in Action)	kW	0	0	0	0	0	4,765	0	0	0	0	0	4,765
	kWh	0	0	0	0	0	7,627,849	0	0	0	0	0	7,627,849
Programs - TOTAL													
Total kW Savings		62	6,596	220	21,053	1,771	175,948	47	0	3,733	2,798	72	212,301
Total kWh Savings		93,021	6,307,472	415,174	30,213,275	2,793,178	183,224,594	59,962	0	4,834,466	8,771,310	124,963	236,837,416